The relationship between the skin and the psyche is undeniable. Any dermatologist can attest to the fact that cutaneous diseases can significantly impact on a patient's quality of life and general outlook. Yet the relationship works the other way, as well. A patient's psychological state can produce manifestations in the skin. Stress has been found to contribute to the severity of chronic inflammatory dermatides like psoriasis, atopic dermatitis, and acne.

Stress, anxiety, and depression are ubiquitous, but the degree to which they affect an individual and the duration of symptoms varies tremendously. Even brief periods of significant psychological or emotional distress can impact the course
of common dermatides. As the degree and duration of stress, anxiety, and depression increases, these symptoms can contribute to the development of cutaneous manifestations independent of traditional dermatologic diseases. These so-called psychodermatoses can be challenging and frustrating for clinicians as well as patients. Dermatologists are experts in the management of the skin, hair, nails, mucus membranes, and psyche. Just as specialists are responsible for identifying an underlying medical disease that manifests as a dermatologic problem, so must they be sensitive to underlying emotional or psychological stress that presents as dermatologic disease.

Most psychodermatoses are readily identifiable based on visual observation and information from the patient history, as described below. As important as listening to the patient, is to critically observe the individual’s affect. It has been observed that one indicator of significant stress, anxiety, or depression in women is the tendency to wear excessive amounts of jewelry, which may be a sign of compulsive shopping, itself associated with mood and anxiety disorders. (Fig 1)

Essential to the identification of patients with significant underlying emotional and psychological stress is questioning, including use of the “SAD Evaluation” (see sidebar). The following review addresses several of the psychocutaneous disorders most commonly encountered in dermatology clinics with emphasis on identification and patient management.

Neurodermatitis (lichen simplex chronicus)

Neurodermatitis or lichen simplex chronicus (LSC) can be one of the most challenging conditions for dermatologists to treat. Although the pruritus of neurodermatitis or lichen simplex chronicus sometimes can be traced back to an inciting event or condition (allergic or irritant contact dermatitis, atopic dermatitis, etc.), by the time the patient presents for treatment, the degree of itch reported exceeds that generally associated with the originating event. The mechanical breakdown of the skin and the epidermal barrier brought on by the patient’s constant scratching produces exponentially more itch, and the challenging itch/scratch cycle ensues. Excoriation, lichenification and hyperpigmentation localized to the nape, scrotum, and lateral malleolus characterize LSC.

There is some evidence that neurodermatitis of the extremities may be associated with underlying vascular insufficiency (sometimes termed urticarial vasculitis) or neuropathy, and clinicians should consider these possible contributing factors. However, in most cases, no cause is found to account for the degree of reported itch. Patients with LSC commonly report increased itchiness during moments of stress, anxiety, or boredom. Research suggests that psychiatric symptoms may be more common in patients with LSC than in patients with other dermatoses. Among 30 patients with LSC, one survey found higher scores on psychiatric scales (Symptom-Checklist-90-Revised, Hamilton Rating Scale for Depression, and Dissociative Experience Scale) compared to 30 patients with tinea. Despite such findings, the consensus among clinicians is that the itch of LSC is not psychogenic. But the urge to scratch may be influenced by psychological factors. According to results of a recent survey, patients with neurodermatitis reported higher levels of sexual dysfunction than did patients with psoriasis and controls, though the reason for this phenomenon is not clear. Both psoriasis and neurodermatitis patients had higher rates of depression than did controls.

Management of LSC is targeted at breaking the itch/scratch cycle. Skincare focused on gentle cleansers, bland emollients, and avoidance of dyes and perfumes that may irritate sensitive skin is the foundation of any interventional approach. The emergence of barrier repair creams, such as EpiCeram (Promius), can be beneficial to support repair of the epidermal barrier brought on by patient manipulation. Standard topical interventions, such as corticosteroids and topical calcineurin inhibitors may help to calm itch. Systemic anti-pruritics, such as diphenhydramine or other antihistamines may also be useful.

Physical barriers that prevent scratching have been employed with mixed results. Wearing long stockings or gloves over affected extremities may help to prevent patients from scratching, but these barriers are impractical and easily removed. Two novel bandages could prove useful and may be less conspicuous for certain areas of involvement. Cordran tape is a product that features Blenderm tape (frosted nearly-clear adhesive tape) impregnated with the mid-potency corticosteroid flurandrenolide. Once put in place, it can be left on for two to three days at a time. In addition to serving as a barrier...
to manipulation, the tape permits localized delivery of an ultra-potent steroid (occlusion increases the potency of the steroid) to the treatment site.

One option that may be suitable for smaller but highly visible affected areas are Band-Aid Liquid Bandages (Johnson & Johnson). The liquid bandage dries clear and is easily applied even to moderately hairy areas. Although the bandage is non-permanent, it takes effort to remove the adherent film, which allows patients to reconsider the desire to scratch. (Fig. 2)

The SAD Evaluation

The most direct method for assessing a patient’s level of psychological or emotional distress is direct questioning. Approximately 10 years ago, I developed the “SAD Evaluation” as a quick and effective way to assess the patient. Ask the patient to self-score each of the following on a scale of 0-10, with zero being none and 10 being worst:

- Stress
- Anxiety
- Depression

Additional questioning regarding obsessive behaviors is also possible (SADO).

Delusions of Parasitosis

The patient with delusions of parasitosis (or delusional parasitosis) can be particularly difficult to manage. These individuals complain of pruritus brought on by organisms—parasites, bugs, mites, “critters,” worms—that only they can see. Some patients actually bring “proof” of infestation to the office, carrying containers, bags, and folded paper-towels that contain “organisms” allegedly collected from the skin. (Fig 3) Yet a thorough examination of the skin shows no evidence of current or recent infestation. No infective organisms are seen on the skin, nor does the patient show signs of erythema, inflammation, or scaling commonly associated with an infestation.

Unlike neurodermatitis, in delusions of parasitosis the itch is psychogenic. The condition is classified as a monosymptomatic hypochondriacal psychosis, indicating that the patient has no other delusions, the current delusion is not secondary to a primary psychosis, and there is no other thought disorder. Therefore, topical or systemic antipruritics may be of limited utility.

The neuroleptic, pimozide (Orap, Gate Pharmaceuticals) 1mg/day is an effective intervention for delusions of parasitosis. A small trial showed that six weeks of pimozide therapy provided marked improvement in 10 of 11 patients, and studies reveal that about half of patients previously treated with pimozide for delusions of parasitosis were delusion-free 19 to 44 months later.

Patients with delusions of parasitosis will frequently describe frustration with previous care providers who were either unable to cure their infestation or unwilling to validate the patient’s belief regarding the presence of infective organ-
isms. These patients truly believe parasites are present and typically are not receptive to any indication that the condition is “in their head.” In fact, a movement has taken hold across the US among patients who have banded together in efforts to prove the existence of a heretofore undiscovered microscopic organism that infects certain humans. Known as the Morgellon’s Research Foundation (www.morgellons.org), this group claims to be investigating a condition that remarkably resembles delusions of parasitosis.

Given the patient’s conviction, there may be reluctance to pursue therapy with an anti-psychotic agent. Rather than broach the topic of antipsychotic therapy, it may be possible to prescribe pimozide with the assurance to the patient that it will improve their condition. One approach may be to tell the patient, “I’ve been practicing for years, and I don’t always know exactly what’s going on with every skin problem. I’ve seen this before. I don’t know what causes it, but it usually responds to this medication.”

**Neurotic Excoriations**

Although psychiatrists today tend to favor more specific terminology, the somewhat subjective “neurotic” label (which was dropped from the Diagnostic and Statistical Manual-III or DSM-III) has traditionally referred to mental stress that does not interfere with rational thought or functioning (versus “psychosis,” marked by loss of touch with reality and impairment of functioning). Neurotic excoriators, then, are individuals who in response to stress or anxiety consciously or unconsciously scratch and pick their skin. The behavior may be classified as a self-mutilating behavior in some cases.

Signs of neurotic excoriation include patterns and sites of wounding inconsistent with accidental injury or typical disease presentation (Fig. 4). Furthermore, cuts, sores, and scratches may be readily identified as caused by fingernails or other implements (including back scratchers and other implements patients may use to scratch).

Data regarding the incidence of skin picking are limited. One recent survey of a non-clinical population discovered 62.7 percent of 354 respondents acknowledged some form of skin picking; 5.4 percent of those respondents reported clinical levels of skin picking and associated distress/impact. Responses on measures of psychological functioning identified direct associations between skin picking and depressive, anxiety, and obsessive-compulsive symptoms.

Management is challenging, as there is no underlying dermatologic condition requiring the clinician’s intervention.

**Factitial Dermatitis**

Factitial dermatitis or dermatitis artefacta shares similarities with neurotic excoriation but there are notable differences.

Among them is the fact that factitious disorder is recognized as a psychological diagnosis in DSM-IV. Whereas neurotic excoriators may pick/scratch unconsciously, those with factitial disease intentionally cause self-injury with the hope of receiving attention.

Factitial dermatitis is apparently more common in women, with incidence ratios reportedly ranging from 3:1 to 20:1. Highest incidence of onset is in late adolescence and early adulthood. The condition may be associated with profound psychologic illness. One of the earliest publications on the disease links it to multiple personality disorder. Shelley described a female patient whose male personality was applying poison ivy leaves to one arm each evening.

Psychiatric referral is the first-line intervention. If it is refused, recommendations for management include the use of psychotropic drugs (upper dose range of selective serotonin reuptake inhibitors (SSRIs), or low dose atypical antipsychotic agents) and continuous involvement of the dermatologist in management of the cutaneous aspects of the patient’s disease.

Frequent follow-up by the dermatologist provides the patient ongoing supervision and support.

**DSM-IV Diagnostic Criteria: Factitious Disorder**

A. Intentional production or feigning of physical or psychological signs or symptoms.

B. The motivation for the behavior is to assume the sick role.

C. External incentives for the behavior (such as economic gain, avoiding legal responsibility, or improving physical well-being, as in Malingering) are absent.

**Trichotillomania**

Whether it involves pulling hair from the scalp or plucking it from eyebrows and lashes, trichotillomania can have numerous manifestations. The compulsion may be accompanied by trichophagia. In one survey, 20 percent of a sample of individuals diagnosed with trichotillomania reported trichophagia, while
another 13 percent reported only episodic consumption of the hair root or shaft. The study failed to identify significant differences between trichophages and non-consumers, though hair eaters tended to be men and to have more severe trichotillomania.

Behavioral therapy, including both positive and negative feedback and/or pharmacologic therapy, may be helpful for trichotillomania. Hair-pulling in children may be most amenable to behavioral modification, and the course of the behavior is usually self-limiting. When pharmacotherapy is indicated, tricyclic antidepressants may be most promising, though serotonin reuptake inhibitors (SRIs) have shown benefits.

**DSM-IV Diagnostic Criteria: Trichotillomania**

A. Recurrent pulling out of one’s hair resulting in noticeable hair loss.

B. An increasing sense of tension immediately before pulling out the hair or when attempting to resist the behavior.

C. Pleasure, gratification, or relief when pulling out the hair.

D. The disturbance is not better accounted for by another mental disorder and is not due to a general medical condition (e.g., a dermatological condition).

E. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

**Borderline Personality Disorder**

Borderline Personality Disorder (BPD) may be the diagnosable personality disorder most commonly encountered by dermatologists. Unlike personality traits—which everyone has—a personality disorder is a series of traits that differs significantly from the norm and causes stress and impairment. BPD represents a disorder of emotion more than thought (patients are not delusional), and so may be considered somewhere between a neurosis and a psychosis. BPD affects about two percent of adults, making it more common than bipolar disorder or schizophrenia, and is most likely to affect young women. BPD has been estimated to account for 20 percent of psychiatric hospitalizations, most of which may be linked to attempted suicides.

Diagnostic criteria for BPD include recurrent suicidal behavior, gestures, or threats, or self-mutilating behavior (Fig. 5). This tendency to self-mutilation may manifest as cutting or burning the skin. In response to a build-up of inner tension, beyond anxiety, that creates a phenomenal sense of inner turmoil, self-injury is associated with a dramatic, temporary drop in tension. This inner turmoil frequently relates to the

BPD patient’s exquisite sensitivity to real, perceived, or imagined abandonment. Fear of abandonment precipitates some of the most dramatic of their behaviors. The self-mutilating behaviors of the BPD patient may be diagnosed as neurotic excoriation or factitial dermatitis if the clinician is not sensitive to or aware of other symptoms of BPD.

Patients with BPD revel in the role of victim and place blame for their problems on others. As such, these patients tend to pose significant management challenges, especially in the realm of cosmetic interventions. In the case of elective or cosmetic procedures, it is wise to avoid providing services to a patient who shows signs of BPD. Within the context of medical dermatology, physicians may find that management of the patient is extraordinarily difficult and may be forced to refer that patient to another provider.

Interventions for BPD have variable efficacy. Individual or group psychotherapy may provide benefit as may dialectical behavioral therapy (DBT). Pharmacologic agents due not address the spectrum of the disorder but may be used to treat specific symptoms, such as depression, anxiety, and labile mood. Importantly, patients may be reluctant to accept any suggestion that they have a personality disorder (you must be the one with a problem, not them), so addressing concerns about BPD can be difficult. It may be helpful to focus solely on the skin manifestations. Demonstrate empathy and assure the patient that you recognize that their behavior is a response
Fig. 5. Evidence of self-mutilation in a patient with BPD.

to the significant stress the patient is under. Suggest that a therapist/psychologist/psychiatrist (whomever you have a referral relationship with) may help the patient manage stress.

**DSM-IV Diagnostic Criteria: Borderline Personality Disorder**

A pervasive pattern of instability of interpersonal relationships, self-image, and affects, and marked impulsivity beginning by early adulthood and present in a variety of contexts, as indicated by five (or more) of the following:

1. Frantic efforts to avoid real or imagined abandonment.
   - **Note:** Do not include suicidal or self-mutilating behavior covered in Criterion 5.

2. A pattern of unstable and intense interpersonal relationships characterized by alternating between extremes of idealization and devaluation.

3. Identity disturbance: markedly and persistently unstable self-image or sense of self.

4. Impulsivity in at least two areas that are potentially self-damaging (e.g., spending, sex, Substance Abuse, reckless driving, binge eating).
   - **Note:** Do not include suicidal or self-mutilating behavior covered in Criterion 5.

5. Recurrent suicidal behavior, gestures, or threats, or self-mutilating behavior.

6. Affective instability due to a marked reactivity of mood (e.g., intense episodic dysphoria, irritability, or anxiety usually lasting a few hours and only rarely more than a few days).

7. Chronic feelings of emptiness.

8. Inappropriate, intense anger or difficulty controlling anger (e.g., frequent displays of temper, constant anger, recurrent physical fights).

9. Transient, stress-related paranoid ideation or severe dissociative symptoms.

**General Management Considerations**

When patients present with psychodermatoses, failure to confront the underlying psychological stress that contributes to development of cutaneous symptoms will typically lead to treatment failure. Topical agents and simple behavioral interventions may lead to short-term improvement in the appearance of the skin in some cases, but with time, the patient’s behavior is likely to revert. Key to successful long-term management is to encourage the patient to diminish and effectively deal with stress, anxiety, and depression.

Although psychological referral may be necessary for extreme cases, dermatologists may be prepared to meaningfully help many patients. Sensitivity and empathy are essential. Treatment recommendations note that nonpharmacological therapies to counteract stress may be sufficient. Alternatively, anxiolytic or antidepressant drugs warrant consideration.

Dr. Bikowski has no relevant disclosures.